

In re Application of  
**Soong** *et al.*

Serial No.: 10/779,518

Filed: February 13, 2004

## For: Power Control for Reverse Packet Data Channel in CDMA Systems

Attorney's Docket No: 4740-237

PATENT PENDING

Examiner: Steven M. Baker

Group Art Unit: 2133

Confirmation No.: 8920

MS AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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February 9, 2007

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Laura A. Wade

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## RESPONSE TO RESTRICTION REQUIREMENT

This submission timely responds to the Restriction Requirement mailed on 9 January 2007, and no fees should be required for its entry. If any fees are required, the Commissioner is hereby authorized to charge them to Deposit Account 18-1167.

## Election and Remarks

Applicant provisionally elects Claim Group III, including claims 17-28, as identified by the examiner in the Restriction Requirement. Applicant believes that the articulated restrictions are improper and the election therefore is made with traverse.

First, as Section 803 of the MPEP directs, the appropriateness of issuing a proper restriction requirement depends on two criteria: the inventions must be

independent or distinct as claimed, *and* there would be a serious burden on the examiner if restriction is not required. Of course, the MPEP also states that examiners make *prima facie* showing of serious burden by showing separate classifications, separate status in the arts, or different fields of search. The MPEP further states that an applicant can rebut restriction arguments through appropriate showings and evidence.

In the instant case, Applicant believes that the examiner can examine all pending claims without serious burden, given the directly related subject matter of all independent claims. Further, as will be detailed below, the classification distinctions made for various ones of the restricted claim groups are in at least some instances artificial and the claim groupings therefore to not serve as *prima facie* evidence of a serious examination burden.

For example, independent claim 9 in Group II claims a base station method for controlling the reverse link transmit power of a mobile station, while independent claim 17 in Group III claims a directly complementary reverse link transmit power control operation at a mobile station. Both claims include explicit limitations to a data-rate variant reverse link traffic channel and to a data-rate invariant reverse link control channel, and the subject matter search for one claim will naturally cover the other. At a minimum, then, Applicant respectfully requests that the examiner withdraw the restriction requirement at least between Groups II and III, such that claims 9-16 and 17-28 are examined together in the instant application.

Further, dependent claims in Group I, e.g., claim 8, include limitations directed to network-based reverse-link transmit power control for a mobile station that sends a traffic channel whose power varies with data rate, and that sends a control channel

whose power is invariant with respect to rate changes of the traffic channel.

Independent claims 17 and 23 of Group III include the same subject matter for mobile station traffic and control signals, but are cast from the perspective of the mobile station being power controlled. Thus, a full search and examination of Group I claims will cover the same subject matter covered by a full search and examination of Group III claims. Thus, Applicant respectfully requests that the examiner further withdraw the restriction requirement between Group III and Group I claims, and that claims for Groups I, II, and III are examined together in the instant application.

The above explained similarities and outright overlap between claimed subject matter among the identified claim groups also highlights the seemingly artificial nature of the identified claim groupings. The artificiality of the claim groupings as articulated by the examiner seriously undercuts the examiner's attempted showing of separate classifications.

For example, the examiner states that claims 1-8 of Group I are directed to "power control responsive to error-detection-code encoded words 'repeated at a desired power control rate', classified in class 714, subclass 798." From the Manual of Patent Classification, Class 714 covers "ERROR DETECTION/CORRECTION AND FAULT DETECTION/RECOVERY," while subclass 798 covers "ERROR DETECTION FOR SYNCHRONIZATION CONTROL," specifically where "error detecting techniques are utilized to detect an out-of-synch condition or to control synchronization between devices."

Claim 1 does not use error detection to detect out-of-synch conditions, nor does it use error detection to control synchronization. Claim 1 explicitly claims controlling the

reverse link power of a mobile station based on receiving a control signal that includes codewords repeated at a desired power control rate. That is, the codewords are sent at a rate corresponding to the desired adjustment rate of the reverse link power. The wireless communication network entity receiving the codewords uses the codewords not to synchronize anything, but rather to determine a “quality metric” which guides its generation of return power control commands for the mobile station.

Thus, there is no logical basis for classifying claim 1 as falling into Class 714/Subclass 798, which covers synchronization through error detection. Moreover, the Classification Manual includes explicit classes for wireless communication systems and devices, e.g., Class 375 for pulse/digital communications and Class 455 for Telecommunications. Brief research by Applicant in the issued patents database maintained by the Patent Office illustrates that, overwhelmingly, patents having claims to reverse or forward link power control in wireless communication networks, such as CDMA networks, are identified as belonging primarily to Class 455 and/or to Class 375. Indeed, Class 455 includes Subclass 522, which is expressly directed to transmission power control techniques between communication stations.

As a further illustration of the misclassification infecting all claim groupings, the examiner states that Group II claims are directed to “power control responsive to the strength of an error-detection-encoded control signal, classified in class 714, subclass 798.” Independent claim 9 of Group II explicitly claims a wireless communication network method of controlling the reverse link transmit power of a mobile station based on “receiving a control signal” and “comparing the strength of the control signal to a power control setpoint.” The claim explicitly states that the control signal is transmitted

by the mobile station at a power level that is invariant with data rate changes on a traffic signal also transmitted by the mobile station.

The claim at no point limits the control signal to an “error-detection-encoded control signal,” and that language originates entirely from the examiner. Indeed, nothing in independent claim 9 or independent claim 12 of Group II in any way supports the classification of these claims into Class 714, Subclass 798, which is, by the way, the identical classification used by the examiner for Group I claims.

Similarly, Group III claims obviously are misclassified in Class 714/Subclass 807, where Subclass 807 involves subject matter “in which a check character, derived as a predetermined function of a group of data bits, is associated with the group of data bits for error detection purposes.” The Group III claims are explicitly directed to a mobile station method and apparatus that controls reverse link transmit power for a traffic channel responsive to data rate changes, while maintaining a current transmit power of a reverse link control channel. On their face, these claims have nothing to do with Class 714/Subclass 807, and the restriction is improper for this reason alone.

Further, Group IV and Group V claims are misclassified as belonging to Class 714/Subclass 798. On that point, Applicant emphasizes the inconsistency and illogic of the restriction groups. For example, the examiner offers markedly different descriptions of the subject matter of Group I, Group II, Group IV, and Group V claims, and yet the Restriction Requirement identifies all of those groups as falling into Class 714/Subclass 798. Indeed, on that point alone, Applicant submits that all such groups must be examined together, because they are alleged to fall into the same class and subclass.

In summary, Applicant believes that the subject matter of the different claim groups is identical, or at least very closely related, and that all claims can be examined together without serious burden and that restriction should not be required. Further, whether the examiner disputes the seriousness of the examination burden, Applicant believes that the Restriction Requirement is invalid on its face and must be withdrawn in its entirety for misclassifying all claim groupings. Applicant submits that the misclassification is self-evident from a comparison between the claim language, the examiner's description of the groupings, and the actual class/subclass definitions in the classification manual.

Respectfully submitted,  
COATS & BENNETT, P.L.L.C.

A handwritten signature in black ink, appearing to read 'MDM', is positioned above the typed name of Michael D. Murphy.

Dated: February 9, 2007

Michael D. Murphy  
Registration No.: 44,958  
Telephone: (919) 854-1844  
Facsimile: (919) 854-2084